REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

As requested, the drawings have been amended so as to avoid minor informalities.

The Examiner's notation with respect to the specification listings not complying with regulations that would actually require consideration of such disclosed prior art is appreciatively noted. It presently appears to the undersigned that such references are included in the specification merely to assist the later reader with respect to understanding and using the invention -- while not being particularly pertinent to the claimed distinction thereover. If and when the undersigned comes into possession of a copy of such documents, they will be promptly submitted in accordance with the regulations applicable for that time of prosecution.

The rejection of claims 1-10 under 35 U.S.C. §101 is respectfully traversed.

The only objection made by the Examiner is an allegation that there has been no disclosure of any "practical application" to the claimed subject matter. The Examiner alleges that "quantification of the earth's surface area heat flow" and "evaluation of the thermal state for related oil and natural gas" are governed by a thermodynamics law of nature.

Actually, although various known and/or unknown laws of nature may well be responsible for heat flow through and within the earth's surface area and/or internal volumes, such laws of nature do not provide any known "quantification" of such heat flow. The applicant has attempted to find a quantifiable <u>model</u> of such underlying laws of thermodynamics with respect to the earth and its various temperature/thermal characteristics. However, the underlying

SRIVASTAVA et al. Appl. No. 10/813,436

October 7, 2005

laws of nature have not yet provided such a quantification or method for quantification. Neither

do the thermodynamics laws of nature (either known or unknown) evaluate the thermal state of

related oil and natural gas deposits or the like.

Obviously there are practical applications for man-made models that can be used to

provide some approximate quantification for such things. Indeed, as explained in the

specification (e.g., see pages 8 and 9), the applicant's invention has practical applications and

determination of oil fields, crystallization of minerals, tectonic studies and the like.

The format of the claims has been amended slightly so as to require inputting and

outputting steps which should clearly put the claimed subject matter within the statutory realm of

35 U.S.C. §101.

Accordingly, this entire application is now believed to be in allowable condition and a

formal Notice to that effect is respectfully solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

LSN:vc

901 North Glebe Road, 11th Floor

Arlington, VA 22203-1808

Telephone: (703) 816-4000

Facsimile: (703) 816-4100

- 11 -

1000803

SRIVASTAVA et al. Appl. No. 10/813,436

October 7, 2005

AMENDMENTS TO THE DRAWINGS

Proposed drawing corrections are shown in red on an attached photocopy of the

originally filed drawings. A proposed replacement page is also attached for each sheet of

corrected drawings.

Attachment: Replacement Sheet(s)

Annotated Sheet Showing Changes

- 9 -

1000803

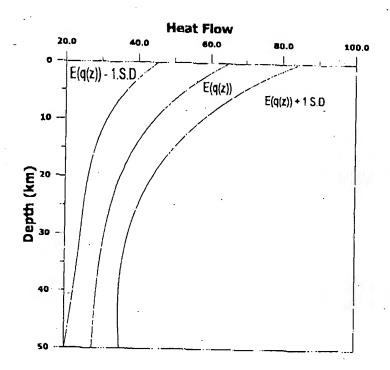


FOR SN 10/8/3, 436

Council of Scientific & Industrial Research

Patent Application No.

Sheek No.



APPRICANTS.

Fig 1

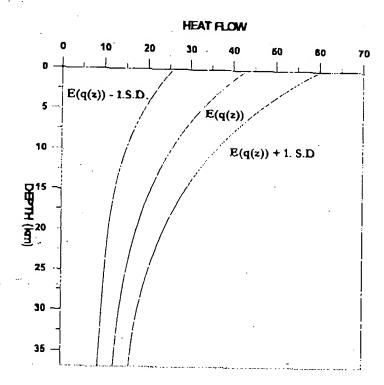
FOR SN 10/8/3, 436

Council of Scientific & Industrial Research

Sheet No.

Pateri Application No.

No of Sheets!



CAPPNICANTS

Fig 2

PLOW-CHART OF THE PROCEDURE

GOVERNING STOCHASTIC
HEAT CONDUCTION EQUATION
WITH
RANDOM THERMAL CONDUCTIVITY AND
AN EXPONENTIALLY DECREASING HEAT SOURCE

ASSOCIATED BOUNDARY CONDITIONS: SURFACE TEMEPRATURE AND SURFACE HEAT FLOW

STOCHASTIC SOLUTION TO THE TEMPERATURE FIELD OBTAINED USING A SERIES EXPANSION METHOD

OBTAIN THE EXPRESSION FOR MEAN HEAT FLOW AND VARIANCE IN HEAT FLOW

F14.3.